

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A system, comprising:  
a memory device;  
a first processor that executes a first program;  
a counter coupled to the memory device and the first processor, wherein a value of the counter is indicative of memory consumption of memory of the memory device by the first program;  
a second processor coupled to the memory device, the second processor executes a garbage collector to free a portion of unused memory in the memory device; and  
wherein executing the garbage collector by the second processor is triggered based on the value of the counter.
2. (Original) The system of claim 1, wherein the value is a programmable threshold value, and wherein when the counter reaches the programmable value, the garbage collector is triggered.
3. (Previously Presented) The system of claim 2, wherein upon reaching the programmable threshold value, the counter sends an interrupt value to the second processor to initiate the garbage collector.
4. (Original) The system of claim 2, wherein a software process is regularly polling the counter to check if the predetermined threshold value has been reached, and wherein upon reaching the predetermined threshold value, the garbage collector is triggered.

5. (Previously Presented) The system of claim 1, wherein the first processor further comprises a decoder coupled to the counter, wherein upon decoding an instruction of the first program requesting memory allocation, the counter is updated with an estimated memory usage value for the instruction.

6. (Previously Presented) The system of claim 1, wherein the first processor replaces an instruction of the program requesting memory allocation with a micro-sequence, wherein upon executing an instruction from the micro-sequence requesting memory allocation[[.]] by the first processor the counter is updated with an exact memory usage value for the instruction of the first program.

7. (Previously Presented) The system of claim 6, wherein the counter resides within the memory device.

8. (Previously Presented) The system of claim 1, wherein a software process is triggered by an instruction of the first program that requests memory allocation, and wherein prior to performing or requesting another memory allocation task, the software process executing on the first processor increments the counter indicative of the memory consumed.

9.-14. (Cancelled)

15. (Previously Presented) A system, comprising:  
a first processor that executes a garbage collector to free unused memory resources within a memory device;  
a second processor coupled to the first processor and the memory that executes a program that allocates memory within the memory device;  
a counter coupled to the first and second processors, wherein the counter indicates memory consumption for the program; and

wherein upon surpassing a threshold value, the counter triggers the garbage collector.

16. (Previously Presented) The system of claim 15, wherein the system further comprises a decoder within the second processor coupled to the counter, and wherein the decoder provides information to update the counter.

17. (Original) The system of claim 16, wherein the decoder decodes a standard Java instruction requesting memory allocation.

18. (Original) The system of claim 17, wherein the counter is updated with an approximate memory usage value.

19. (Original) The system of claim 16, wherein the decoder decodes an instruction from a micro-sequence requesting memory allocation.

20. (Original) The system of claim 19 and wherein the counter is updated with an exact memory usage value.

21. (Previously Presented) The system of claim 15, wherein the counter is monitored periodically by a software process that triggers the garbage collector when the counter reaches a predetermined threshold, and wherein the software process executes in at least one selected from the group consisting of: the first processor; or the second processor.

22. (Previously Presented) The system of claim 15, wherein the first processor is a main processor and the second is a processor that directly executes at least some Java bytecodes .

23.-24. (Cancelled)

25. (Original) The system of claim 15, wherein the system is a cellular telephone.

26. (Currently Amended) A computer-readable ~~media~~storage medium comprising a plurality of instructions that, when executed by a processor, cause the processor to:

- monitor memory consumption of a memory device for one or more programs executed in a first processor;
- trigger a garbage collector program in a second processor to free a portion of the memory upon surpassing a threshold memory consumption; and
- update a memory usage counter after retrieving a portion of the memory.

27. (Currently Amended) The computer-readable storage medium as defined in claim 26 wherein when the processor monitors memory consumption, the instructions cause the processor to monitor memory consumption of the one or more programs on the first processor being the same processor on which the plurality of instructions execute.

28. (Currently Amended) The computer-readable storage medium as defined in claim 26 wherein when the processor monitors memory consumption, the instructions cause the processor, being the second processor, to monitor memory consumption of the one or more programs on the first processor.

29. (Currently Amended) The computer-readable storage medium as defined in claim 26 wherein when the processor monitors memory consumption, the instructions cause the processor to monitor the value of a counter.

30. (Currently Amended) The computer-readable storage medium as defined in claim 29 wherein when the processor monitors the counter the instructions cause the processor to monitor the counter in the first processor.